RSOP for Facility Disposition Revision 0, February 29, 2000 cg

Section

Comment

Introduction

Provided the RSOP is used for facility demolition what additional RFCA decision document would be required? Is this the ER RSOP? Has the ER RSOP been developed and if so, does it address core slab sampling and other ER activities which must be coordinated during D&D?

Figure 1

DOPs and IM/IRAs are not included, why? For "contaminated demolition" what group/program is responsible for waste disposition? What procedure will be used to monitor, measure and collect the contaminated rubble?

- What is to be included in the Demolition Plan? Why is this document not subject to the RFCA approval process?
- It is somewhat vague as to what the notification letter will include. The notification letter must define what requirements and controls from the RSOP will be utilized.
- What does the FDPM say? Do we have a copy?

This section proposes removal of slab, foundation or facility footing to at least 3 feet below ground surface. Again, what is the basis? What about our previous proposal to remove all clean foundations to facilitate future use? What happens to underground tank and piping systems?

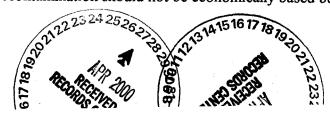
Figure 2

Has the "free release criteria" for slab/foundation/footing/soil been established? Is the ER RSOP going to define this criteria or is this part of the Pre-Demolition Survey Plan?

What are the requirements for leaving a slab in place with an interim cover? Where will these requirements be identified?

4.2 Why aren't the qualification requirements for the contractor included in this RSOP?

"Contaminated demolition will occur when it is not economically feasible to completely free release the facility, or for health and safety reasons, it is determined that it is not beneficial to try to decontaminate the facility to free-release criteria." This statement is inadequate. First of all, the reasons/criteria identified are very "loose." Secondly, the decision to either eliminate or discontinue decontamination should not be economically based but technology



based. Once the Site has exhausted <u>all</u> reasonable decontamination options, <u>then</u> and <u>only then</u>, should the possibility of contaminated demolition be considered.

Once that decision is made (consultatively of course) that contaminated demolition is the <u>only</u> option, an RSOP is <u>not</u> the appropriate regulatory mechanism for conducting the work. The amount and type of detail currently available is nowhere near the necessary information to safely and effectively perform contaminated demolition in the future.

Based on the language provided, the decision to perform contaminated demolition is based solely on the disposal costs vs. decontamination costs. This sections fails to recognize the environmental ramifications (e.g., air and water monitoring requirements, radiological monitoring and surveys) as well as other costs (administrative and engineering controls).

- 4.2.2 Is there any evidence available that conclusively shows that the fixative to be used will be effective during demolition using the methods described in Section 4.2.4 which includes the potential use of explosives? How will the Site account for and mitigate the hazards associated with contamination between layers of roofing and walls?
- 4.2.3 "If the emissions can be controlled with standard dust control techniques (Section 4.3.1), no containments will be necessary." The only dust control techniques identified which are in Section 4.3.2 include the use of water during periods with low wind. How will application of water on contaminated material prevent both airborne and water contamination?
- Figure 4 Remove the box "Perform cost analysis."
 - 4.2.4.6 Is it realistic to propose the use of explosives at RFETS?
- Figure 5 Other than "non-explosive cracking agent," are there any proposed demolition techniques that do not generate dust? What criteria will be used to determine if "standard dust suppression methods" are adequate? Define local HEPA ventilation. How will this be used in the case of a contaminated roof?
 - 4.5 All waste, including that covered by the requirements of the Consent Orders, will be removed prior to facility demolition.
 - 7.2 Provide a copy of the following documents: Betonamit Technical Manual,
 Rimrock Explosives, Hayden Lake, ID and Facility
 Disposition Cost Model, Revision 2, May 1999.

Comment

- 1. The contamination concerns/procedures discussed are generally for radiological concerns. What about other contamination, such as Be, which is a major contaminant in several of the large building (444, 865, 883, etc). Why aren't monitoring requirements for other contaminants included in this RSOP?
- 2. In the introduction it is identified that this RSOP will "Fulfill the consultative process obligations for Type 1 facilities". I may not understand what this statement is referring to, but it seems that this is not the case, and this statement needs to be modified or removed.
- 3. Section 2 Facility and Cluster Descriptions Approval of this document should not be an approval of Attachment 1, which lists the clusters and identifies the Type of all of the facilities in each cluster. The proposed facility type as provided in Attachment 1 can not be agreed to until the history and RLCR for each facility identified has been completed and reviewed. This list and the facility Type must be identified as tentative.
- 4. Section 4 Demolition Approach It is indicated that the slab, foundation or footing will be removed to at least 3 feet below ground surface. Does this also include the piping and drains immediately under and adjacent to the building? How are the building sumps, pits, tunnels, and basements to be addressed if they are more than three feet below ground surface? Are the cement areas (sidewalks, driveways, pads, etc) associated with or adjacent to facilities being demolished, to be removed also?
- 5. Section 4.3.3 Surface Water All water generated during any demolition activity needs to be contained or at least controlled and sampled to show that contaminant releases are not occurring. Also, the "contamination" identified in this RSOP seems to generally refer to radiological contamination. However, there are other contaminants that may be released during demolition of "uncontaminated" buildings. As such, all contaminants of concern need to be addressed not just the rads. This is specifically a concern with possible Be contamination.
- 6. Section 4.4.4 Surface Water Pathways of concern for surface water needs to include foundation drains, even if the internal drain openings are plugged. Buildings with foundation drains are constructed such that water falling on the ground surface next to the building will flow into the ground down to the drain system where it will be collected and flow to the outfalls of the foundation drains. As such, the outfalls need to be monitored during D&D activities including demolition. Also, buildings with adjacent or concurrently located IHSSs or PACs present potential problems with water flowing through or across the potentially contaminated soil (especially if this soil is disturbed during D&D activities), which may generate contamination even if the building is not "contaminated".
- 7. Section 4.5.2 Management Requirements for Remediation Waste As with other sections of this document, the LRA should be included in the process.
- 8. Table 4 Material Recycling Options The identification of "clean" scrap metal, only includes rads and RCRA concerns. This also needs to include other concerns such as possible Be contamination.

- 9. Section 5.2 Air Quality Due to the past use and potential for release of Be this should also be included in the possible contaminants to be assessed.
- 10. Section 7.1 Implementation Schedule This appears to imply that once this document is provided and approved for type 1 and 2 facilities, that no other decision documents will be prepared in relation to the demolition of type 1 or 2 buildings. Type 2 buildings should have other documents that provide the specific activities that are to be performed. As such, this language should be modified to properly address what is intended when it is stated that "No further formal approvals are required."
- 11. Attachment 2 Surface Water Management Practices If swales are constructed for specific activities, monitoring/sampling of the runoff flowing through them should be performed for the analytes and parameters of concern.

rh

1. Surface Water Components

In general, it looks like they have provisions that should be protective of surface water. The one area of concern I have is in relation to the disposal of "incidental waters". The screening done on such waters does not initially look at specific isotopes, but relies upon alpha beta analysis and the judgement of people reviewing the results. I can understand that waiting 2 weeks or plutonium results may be unreasonable - and I think they do have some data review criteria that should be protective of the environment. The actinide analytical limitations are a concern beyond just this RSOP and I hope that we can get some better methods soon. The NPDES permit requires them to investigate new, faster methods of analysis. So - I think it is possible that an ICP/MS method with a one-day turn around time could be developed soon. Then we can push for using that method on incidental waters.

2. Protection of Sanitary Sewers and Foundation Drains

My suggestion is to add another section to 4. Demolition Approach:

Section 4.3.4. Protection of Sanitary Sewers and Foundation Drains

Measures will be take to protect sanitary sewer and foundation drain system from the introduction of contaminants (including radionuclides) during or as a result of D&D activities.

There are a limited number of areas where it has not been possible to verify whether or not there are drains leading to sanitary sewers or foundation drains. And, detailed plans laying out the routes that will be taken to remove contaminated materials from buildings or locations where such materials may be temporarily stored have not yet been written. There is also uncertainty about the extent of under-building contamination and the effects of D&D activities on groundwater quality, levels and sewer line or foundation drain integrity.

As detailed Demolition Plans and IWCP's are developed, the following measures must be incorporated into the plans in order to insure that releases of contamination to sanitary sewers and foundation drains will be avoided:

- 1) Locate all foundation drains and sewer lines under and in the vicinity of the building.
- 2) Seal off sewer lines or foundation drains coming from the portion of the building that is undergoing D&D.
- 3) Check that drains in rooms with contamination have been sealed.
- 4) Identify the routes that will be taken within buildings to remove contaminated materials.
- 5) Identify locations in buildings where contaminated materials will be temporarily stored.
- 6) Check to make sure all drains in travel routes and temporary storage areas have been sealed.
- 7) Determine the elevations of the sewer lines under and in the vicinity of the building.
- 8) Determine the elevation of the groundwater under and in the vicinity of the building.
- 9) Assess the effect on groundwater levels from removing/disabling foundation drains.
- 10) Assess the effect on groundwater levels be affected by other activities.
- 11) Assess the quality of groundwater under and in the vicinity of the building.
- 12) Assess under-building contamination.
- 13) Identification of the parties responsible for accomplishing these tasks
- 14) Develop a schedule for completing these tasks.

In addition to this Section 4.3.4., which could be inserted into the Demolition Approach part of the RSOP, Section 5.3 - Water Quality should be revised to specifically mention potential releases to sanitary sewers or foundation drains.